



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/637,500	08/11/2000	Robert Gelinas	07030.0011-00	7608

26171 7590 09/08/2004

FISH & RICHARDSON P.C.
1425 K STREET, N.W.
11TH FLOOR
WASHINGTON, DC 20005-3500

EXAMINER

TSAI, HENRY

ART UNIT	PAPER NUMBER
----------	--------------

2183

DATE MAILED: 09/08/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/637,500	Applicant(s) GELINAS ET AL.	
	Examiner Henry W.H. Tsai	Art Unit 2183	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 21 July 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) 6-10 is/are withdrawn from consideration.
- 5) ☐ Claim(s) is/are allowed.
- 6) ☒ Claim(s) 1-5 is/are rejected.
- 7) ☐ Claim(s) is/are objected to.
- 8) ☒ Claim(s) 6-10 are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. .
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) ✓
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s)
- 4) ☐ Interview Summary (PTO-413) Paper No(s)
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

Art Unit: 2183

DETAILED ACTION

Election/Restrictions

1. Applicant's election without traverse of Group I, claims 1-5 in the reply filed on 6/21/04 is acknowledged.
2. This application contains claims 6-10 are drawn to an invention nonelected without traverse in the reply filed on 6/21/04. A complete reply to the final rejection must include cancellation of nonelected claims or other appropriate action (37 CFR 1.144) See MPEP § 821.01.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

Art Unit: 2183

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

4. Claims 1, 2, and 3 are rejected under 35 U.S.C. 102(e) as being anticipated by Agarwal et al. (U.S. Patent No. 6,308,252, hereafter referred to as Agarwal et al.'252.

Referring to claim 1, Agarwal et al.'252 discloses, as claimed, a digital signal processor (100, see Figs. 1 and 3) comprising: two execution pipelines (first pipeline 314 and second pipeline 316, see Fig. 3) capable of executing RISC instructions (See Col. 5, lines 30-33; and Col. 4, lines 19-24); instruction fetch logic (instruction fetch unit 310, see Fig. 3) that simultaneously fetches (see Col. 4, line 19-20, and Col. 6, lines 8-9) two instructions and routes them to respective pipelines (first pipeline 314 and second pipeline 316, see Fig. 3); and control logic (312, see Fig. 3 and Col.7, lines 34-36) to allow the pipelines to operate independently.

Art Unit: 2183

As to claim 2, Agarwal et al.'252 also discloses: the instruction fetch logic (instruction fetch unit 310, see Fig. 3) includes logic that fetches dual SIMD instructions (see Col. 4, line 19-225, Col. 5, lines 50-51, and Col. 6, lines 8-10).

As to claim 3, Agarwal et al.'252 discloses the claimed two registers (311a and 311b, see Fig. 5) each half the length of a word (broadly interpreted since a word length was not well defined) fetched for memory, and the instruction fetch logic (instruction fetch unit 310, see Fig. 5) that fetches a single word into the two registers (311a and 311b, see Fig. 5) simultaneously.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 4, and 5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Agarwal et al.'252 in view of Chuang

Art Unit: 2183

(U.S. Patent No. 4,766,566), hereafter referred to as Chuang' 566.

Agarwal et al.'252 discloses the claimed invention except for: explicitly showing to use an eight port general register file (claim 4) and the general register file including four read registers and four write registers (claim 5).

Chuang' 566 discloses an eight port general register file (48, see Fig. 2); and the general register file including three read registers and five write registers (48, see Fig. 2). However, the number of the read and write registers are changeable as required in practice.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Agarwal et al.'252's system to comprise: an eight port general register file; and the general register file including four read registers and four write registers, as taught by Chuang' 566, in order to facilitate reading and writing the data efficiently for the Agarwal et al.'252's system. Besides, the number of the read and write registers are changeable as required in practice.

Further, as shown in re Rose, 105 USPQ 237 (CCPA 1955), to make changes in size/range generally does not provide patentable weight to the claimed invention.

Art Unit: 2183

Conclusion

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure, such as Schwatz et al.'736 also discloses an eight port register 30 as shown in Figs. 2 and 4; and Luick'780 also discloses an eight write ports and twelve read ports register 52 as shown in Fig. 1

Contact Information

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dr. Henry Tsai whose telephone number is (703) 308-7600. The examiner can normally be reached on Monday-Thursday from 8:00 AM to 5:00 PM. If attempts to reach the examiner by telephone are unsuccessful, the examiner supervisor, Eddie Chan, can be reached on (703) 305-9712. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the TC 2100 receptionist whose telephone number is (703) 305-3900.

Art Unit: 2183

9. In order to reduce pendency and avoid potential delays, Group 2100 is encouraging FAXing of responses to Office actions directly into

the Group at fax number: 703-872-9306.

This practice may be used for filing papers not requiring a fee. It may also be used for filing papers which require a fee by applicants who authorize charges to a PTO deposit account. Please identify the examiner and art unit at the top of your cover sheet. Papers submitted via FAX into Group 2100 will be promptly forward to the examiner.



HENRY W. H. TSAI
PRIMARY EXAMINER

September 6, 2004